



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/682,276	08/13/2001	Rieko Kataoka	JP920000224US1	4826

877 7590 06/20/2003

IBM CORPORATION, T.J. WATSON RESEARCH CENTER
P.O. BOX 218
YORKTOWN HEIGHTS, NY 10598

EXAMINER

LAO, LUN YI

ART UNIT	PAPER NUMBER
----------	--------------

2673

DATE MAILED: 06/20/2003

2

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/682,276

Applicant(s)

Kataoka et al

Examiner

Lun-yi Lao

Art Unit

2673

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on May 7, 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above, claim(s) 4, 9-13, and 15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 6, 8, and 14 is/are rejected.
- 7) ☒ Claim(s) 7 is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

Art Unit: 2673

DETAILED ACTION

Election/Restriction

1. Applicant's election without traverse of Species I(claims 1-3, 5-8 and 14) in Paper No. 7 is acknowledged.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Palalau et al(6,049,324).

As to claims 1-3 and 14, Palalau et al teach a display apparatus comprising a display screen(22) and a display controller(40) for changing the refresh rate of display screen according to the brightness of display screen(22)(see figure 1; column 1, lines 8-37; column 2, lines 40-67 and column 3, lines 1-6).

Art Unit: 2673

As to claim 14, Palalau et al teach detecting means for detecting the changing in brightness(brightness code) of the display(22)(see figure 1; column 2, lines 40-68 and column 3, lines 1-62).

As to claim 2, Palalau et al teach the display controller(40) can change the refresh rate to a plurality of levels(see figure 1; column 1, lines 26-38 and column 3, lines 11-62).

As to claim 3, Palalau et al teach the display controller(40) can change the refresh rate to when a predetermined condition(brightness code) is met(see figure 1; column 1, lines 23-62 and column 2, lines 42-58).

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Art Unit: 2673

5. Claims 1, 3 and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by Toffolo et al(6,337,675).

As to claims 1, 3 and 14, Toffolo et al teach a display apparatus comprising a display screen(22) and a display controller(26, 30) for changing the refresh rate of display screen according to the brightness of display screen(22)(see figure 1; column 1, lines 57-68 and column 2, lines 1-13).

As to claim 14, Toffolo et al teach detecting means(30) for detecting the changing(manual changing 26) in brightness of the display(22)(see figure 1; column 1, lines 65-62 and column 2, lines 9-13).

As to claim 3, Toffolo et al teach the display controller(30) can change the refresh rate to when a predetermined condition(the ambient light level between Points A-B) is met(see figure 1; column 1, lines 58-68 and column 2, lines 14-28).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2673

7. Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hyatt(4,121,284) in view of Arakawa(6,268,843).

Hyatt teaches a display apparatus comprising a display panel(LCD 408)(see figure 4; column 26, lines 16-18). Hyatt teaches the luminance of the display(408) can be changed by varied the refresh rate of the display(408)(see column 25, lines 20-29).

Hyatt fails to teach a back light for controlling the luminance of the display.

Arakawa teaches an LCD display having a back light(20) for controlling the luminance levels of the display(30)(see figures 2-3 and column 3, lines 5-54). It would have been obvious to have modified Hyatt with the teaching of Arakawa, so as to provide a display device having a high luminance resolution and a high definition(see column 1, lines 35-37).

8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hyatt(4,121,284) in view of Arakawa(6,268,843) and Friend et al(6,052,279).

Hyatt as modified fail to control the luminance of the back light source can be controlled by a user.

Friend et al teach the luminance of the back light source can be controlled by a user(see column 4, lines 34-43). It would have been obvious to have modified Hyatt as modified with the teaching of Friend et al, since the luminance of light source can be changed as a user wanted.

Art Unit: 2673

Allowable Subject Matter

9. Claim 7 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Palalau(6,266,035) teaches a display controller varies the voltage and refresh rates of each of plurality of pixels in order to provide varying levels of brightness of the pixels.

Budzilek et al(5,445,899) teach the brightness of a display is proportional to the refresh rate of the display(see column 3, lines 18-20).

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lun-yi, Lao whose telephone number is (703) 305-4873.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala, can be reached at (703) 305-4938.

Any response to this action should be mailed to:

Art Unit: 2673

Commissioner of Patents and Trademarks

Washington, D.C. 20231

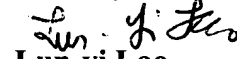
or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

June 13, 2003



Lun-yi Lao

Primary Examiner